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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,104	08/31/2001	J.J. Garcia-Luna-Aceves	UC2000-385-2	2125
8156	7590	10/19/2004	<div>EXAMINER</div> <div>BELL, MELTIN</div>	
JOHN P. O'BANION O'BANION & RITCHEY LLP 400 CAPITOL MALL SUITE 1550 SACRAMENTO, CA 95814			<div>ART UNIT</div> <div>2121</div>	<div>PAPER NUMBER</div>
DATE MAILED: 10/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,104

Applicant(s)

GARCIA-LUNA-ACEVES ET AL.

Examiner

Meltin Bell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **09/945,104** filed 08/31/2001 as well as the Drawing Corrections and Amendment filed 6/23/04. Claims 1-36 filed by the applicant have been entered and examined. An action on the merits of claims 1-36 appears below.

Priority

Applicant's claim for domestic priority against application number 60/226,646 filed **8/31/00** under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 102

Applicant's arguments have been fully considered but they are not persuasive. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 17-22 and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by *Donahue et al* U.S. Patent Number 6,101,180 (Issued August 8, 2000; Filed November 12, 1997).

Regarding claim 1:

Donahue et al teaches,

- grouping routing-table entries in a router into numbered clusters for lookup of a routing-table entry based on cluster number and destination address (column 7, lines 6-11, "At each interconnection...to all routers"; column 10, lines 1-14, "The ISP or...a conflicting address"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters"; column 27, lines 48-61, "The packet filter...standard Ethernet proto-cols")

Regarding claim 2:

Donahue et al further teaches,

- assigning a cluster number to a data packet (column 8, lines 26-47, "IP Multicast uses...different permanent addresses")

Regarding claim 3:

Donahue et al further teaches,

- routing said data packet based on a routing-table entry selected from a group of routing-table entries based on said cluster number and a destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")

Regarding claim 4:

Donahue et al further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

Regarding claim 5:

Donahue et al further teaches,

- matching the cluster number associated with said data packet to a corresponding cluster number associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")

Regarding claim 6:

Donahue et al further teaches,

- searching routing-table entries associated with said cluster number using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable... SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")

Regarding claim 7:

The rejection of claim 6 is incorporated. Therefore, claim 7 is rejected under the same rationale as claim 6.

Regarding claim 8:

Donahue et al further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

Regarding claim 17:

Donahue et al further teaches,

- grouping routing-table entries into numbered clusters for lookup of a routing-table entry based on cluster number and destination address (column 7, lines 6-11, "At each interconnection...to all routers"; column 10, lines 1-14, "The ISP or...a conflicting address"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters"; column 27, lines 48-61, "The packet filter... standard Ethernet proto-cols")
- routing a data packet based on a routing-table entry selected from a group of routing-table entries based on a cluster number and a destination address associated with said data packet (column 10, lines 15-31, "The address re-routing... as defined below")

Regarding claim 18:

Donahue et al further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

Regarding claim 19:

Donahue et al further teaches,

- matching the cluster number associated with said data packet to a corresponding cluster number associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")

Regarding claim 20:

Donahue et al further teaches,

- searching routing-table entries associated with said cluster number using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable... SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters")

Regarding claim 21:

The rejection of claim 20 is incorporated. Therefore, claim 21 is rejected under the same rationale as claim 20.

Regarding claim 22:

Donahue et al further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

Regarding claim 31:

Donahue et al further teaches,

- grouping routing-table entries into numbered clusters for lookup of a routing-table entry based on cluster number and destination address (column 7, lines 6-11, "At each interconnection...to all routers"; column 10, lines 1-14, "The ISP or...a conflicting address"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table...number of clusters"; column 27, lines 48-61, "The packet filter... standard Ethernet proto-cols")

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- matching a cluster number associated with a data packet to a corresponding cluster number associated with said routing-table entries (column 28, lines 55-67, "the packet filter...be transmitted onto"; column 29, lines 1-5, "the LAN 220...be read again")
- routing said data packet based on a routing-table entry selected from a group of routing-table entries based on the cluster number and the destination address associated with said data packet (column 10, lines 15-31, "The address re-routing...as defined below")

Regarding claim 32:

Donahue et al further teaches,

- replacing said cluster number of said data packet with a new cluster number when said packet is routed (column 10, lines 33-53, "an agent might...will be tried")

Regarding claim 33:

Donahue et al further teaches,

- searching routing-table entries associated with said cluster number using a destination address associated with said data packet as an index (Fig. 18, item 615; Fig. 20, item 650; column 28, lines 44-50, "The field programmable... SRAM bus architecture"; column 22, lines 42-65, "The Channel Cluster...number of channels"; column 23, lines 1-7, "The overall table... number of clusters")

RESPONSE TO APPLICANTS' AMENDMENT REMARKS

Information Disclosure Statement (IDS)

Applicant(s) argue(s) that IDS references noted in the prior office action for missing or inaccurate publication dates must be considered as references with publication dates more than one year prior to the applicant's effective priority date: Gonnet et al. - 1991, Waldvogel et al. - October 1997, Bremner-Barr et al. - 1999, Brodnik et al. - 1997, Chandranmenon et al. - April 1996, Guo et al. - April 1998, Gupta et al. - April 1998, Sola et al. - 1998, Briscoe et al. - November 1997 (Amendment REMARKS page 11, paragraph 4 and page 12, paragraph 1). Applicant(s) also argue(s) that the possibly unconsidered Estrin et al, Merit Networks, Sola et al and Viswanathan et al (ARIS: Aggregate Route-Based IP Switching) - May 1997/November 1996/October 2001 references should be considered (Amendment REMARKS page 12, paragraphs 1-3). The examiner confirms that the IDS references mentioned in the prior office action were considered 2/11/04. The IDS objections are withdrawn.

Drawings

Applicant(s) argue(s) that one of ordinary skill would readily understand Fig. 5's item number labels (Amendment REMARKS page 13, paragraph 1). The amendments to the Fig. 5 have been entered and examined. The objection to Fig. 5 is withdrawn.

Claim Objections

Applicant(s) argue(s) that deleting "corresponding" from the claims removes the confusion (Amendment REMARKS page 13, paragraph 2). Applicant's arguments have

been fully considered and are persuasive. The objection of claims 11 and 25 are withdrawn.

Claim Rejections - 35 USC § 101

Applicant(s) argue(s) that the preamble of Claim 1 ("routing data packets in a network") renders the claim statutory (Amendment REMARKS page 14, paragraph 2). Applicant's arguments have been fully considered and are persuasive. The rejection of claim 1 has been withdrawn.

Claim Rejections - 35 USC § 102 and 35 USC § 103

Applicant(s) argue(s) that Donahue USPN 6,101,180 does not teach claims 1's grouping routing-table entries in a router into numbered clusters for lookup of a routing-table entry based on cluster number and destination address (Amendment REMARKS page 17, last paragraph). Applicant's arguments have been fully considered but they are not persuasive. Donahue column 8, lines 11-40 ("RFC 1112, Host Extensions for ... reserved for applications") is cited for disclosing the subject matter set forth in the claims by the applicants: clusters or cluster numbers in the subject application are groups identified by a group address in Donohue.

Applicant(s) argue(s) that Donahue does not discuss claim 17's routing a data packet based on a routing-table entry selected from a group of routing-table entries based on a cluster number and a destination address associated with said data packet (Amendment REMARKS page 19, paragraph 1). Applicant's arguments have been fully

considered but they are not persuasive. Donahue column 8, lines 11-40 ("RFC 1112, Host Extensions for ... reserved for applications"), column 10, lines 1-5 ("The ISP or domain ... available address block"), column 13, lines 12-39 ("If the multicast ... the joined list") are cited for disclosing the subject matter set forth in the claims by the applicants: clusters/cluster numbers and routing-tables in the subject application are groups/group addresses and routing/group tables, respectively, in Donohue.

Applicant(s) argue(s) that Donahue does not teach claim 31's matching a cluster number associated with a data packet to a corresponding cluster number associated with said routing-table entries (Amendment REMARKS page 20, paragraph 3).

Applicant's arguments have been fully considered but they are not persuasive.

Donahue column 8, lines 11-40 ("RFC 1112, Host Extensions for ... reserved for applications"), column 10, lines 1-5 ("The ISP or domain ... available address block"), column 13, lines 12-39 ("If the multicast ... the joined list") are cited for disclosing the subject matter set forth in the claims by the applicants: clusters/cluster numbers and routing-tables in the subject application are groups/group addresses and routing/group tables, respectively, in Donohue.

Applicant(s) argue(s) that claims 34 and 36 are patentable over Donahue et al. for the same reasons set forth above with regard to claims 1, 17 and 31 (Amendment REMARKS page 22, paragraph 2 and page 24, paragraph 2). Applicant's arguments have been fully considered but they are not persuasive for the above reasons claims 1, 17 and 31 are rejected.

Conclusion


Any inquiry concerning this communication or earlier communications from the Office should be directed to Melvin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB



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